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10/556,248

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Albert Maria Arnold Rijckaert

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BRIARCLIFF MANOR, NY 10510

EXAMINER

DAZENSKI, MARC A

ART UNIT

PAPER NUMBER

2621

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/556,248

Applicant(s)

RIJCKAERT, ALBERT MARIA
ARNOLD

Examiner

MARC DAZENSKI

Art Unit

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☒ Claim(s) 12-13 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 November 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

The drawings are objected to because the unlabeled rectangular box(es) shown in the drawings should be provided with descriptive text labels. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

Claim 12 is objected to because of the following informalities: line 2 of the claim reads "...linking information comprises successive instalments of for succesive parts..." The examiner interprets this to mean "...linking information comprises successive instalments of successive parts..." Appropriate correction is required.

Claims 12 and 13 are objected to because of the following informalities: the word "installments" is misspelled as "instalments" in line 2 of claim 12, and line 1 of claim 13. Appropriate correction is required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The USPTO "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" (Official Gazette notice of 22 November 2005), Annex IV, reads as follows:

Claims that recite nothing but the physical characteristics of a form of energy, such as a frequency, voltage, or the strength of a magnetic field, define energy or magnetism, per se, and as such are nonstatutory natural phenomena. O'Reilly, 56 U.S. (15 How.) at 112-14. Moreover, it does not appear that a claim reciting a signal encoded with functional descriptive material falls within any of the categories of patentable subject matter set forth in Sec. 101.

... a signal does not fall within one of the four statutory classes of Sec. 101.

... signal claims are ineligible for patent protection because they do not fall within any of the four statutory classes of Sec. 101.

Claim 13 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows. Claim 13 defines a video play stream signal with descriptive material. While "functional descriptive material" may be claimed as a

statutory product (i.e., a “manufacture”) when embodied on a tangible computer readable medium, a video play stream signal embodying that same functional descriptive material is neither a process (i.e., a series of steps per se.) nor a product (i.e., a tangible “thing”) and therefore does not fall within one of the four statutory classes of § 101. Rather, “signal” is a form of energy, in the absence of any physical structure or tangible material.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-13 are rejected under 35 U.S.C. 102(b) as being anticipated by DeMoney (US Patent 6,065,050), hereinafter referred to as DeMoney.

Regarding **claim 1**, DeMoney discloses a system and method for indexing between trick play and normal play video streams in a video delivery system. Further, DeMoney discloses a video server or video delivery system (30) for storing and transferring video streams, which reads on the claimed, “a method of recording a video stream,” as disclosed at column 6, lines 15-18; the method comprising:

server (50) receiving a normal play video stream or multimedia stream, which reads on the claimed, “receiving a video stream (10),” as disclosed at column 7, lines 62-63;

the term “trick play streams” referring to fast forward and/or fast reverse streams, which are generated from a normal play stream, and which have a different presentation rate than the normal play stream, which reads on the claimed, “generating a trickplay stream (11, 15) from the video stream, by selecting and arranging data from the video stream (10), the trick play stream (11, 15), when played at normal rate, representing the video stream at a trickplay rate,” as disclosed at column 6, lines 43-47;

utilizing computer system (60) which includes a RAID disk array (90) or other storage media for storing the normal play streams and corresponding trick play streams, which reads on the claimed, “storing the trickplay stream (11, 15) and a normal play stream (10) corresponding to the video stream (10) as separately accessible files on at least one randomly accessible storage device (4),” as disclosed at column 7, lines 2-5; and,

utilizing server (50) to create an index of look-up tables for each of the multimedia stream, i.e., for the normal play stream and each of the trick play streams, the index look-up table for the normal play multimedia stream comprises an index or array of two-tuples, each tuple comprises a normal play time value and a corresponding file offset within the stream, which reads on the claimed, “providing linking information (12), which links positions of content within the normal play stream (10) to positions of corresponding content within the trickplay stream (11, 15),” as disclosed at column 9, lines 13-20.

Regarding **claim 2**, DeMoney discloses a system and method for indexing between trick play and normal play video streams in a video delivery system. Further,

DeMoney discloses a video server or video delivery system (30) for storing and transferring video streams, which reads on the claimed, “a method of replaying a video stream,” as disclosed at column 6, lines 15-18; the method comprising:

compressed normal play and trick play streams may be comprised on a storage media in the media server (50) such as a RAID disk array, CD-ROM, or DVD, the term “trick play streams” referring to fast forward and/or fast reverse video streams, which are generated from a normal play stream and which have a different presentation rate than the normal play stream, which reads on the claimed, “providing a randomly accessible storage device (4) in which a normal play stream (10) and a trickplay stream (11, 15) are stored as separately accessible files, the trickplay stream (11, 15) when played at normal rate representing the normal play stream (10) data at a trickplay rate,” as disclosed at column 6, lines 43-47 and column 7, lines 27-30;

utilizing server (50) to create an index of look-up tables for each of the multimedia stream, i.e., for the normal play stream and each of the trick play streams, the index look-up table for the normal play multimedia stream comprises an index or array of two-tuples, each tuple comprises a normal play time value and a corresponding file offset within the stream, which reads on the claimed, “providing linking information (12), which links positions of content within the file for the normal play stream (10) to positions of corresponding content in the file for the trickplay stream (11, 15),” as disclosed at column 9, lines 13-20;

media server (50) reading the respective normal play or trick play stream from the storage media and providing the data out to the one or more display units or

viewers, which reads on the claimed, “replaying a part of a play stream (10, 11, 15) from one of the files in the at least one randomly accessible storage device (4),” as disclosed at column 7, lines 30-33;

media server (50) indexing or switching between normal play and trick play video streams generally based on user selections, which reads on the claimed, “receiving a switch signal during replay of the part of the play stream (10, 11, 15), the switch signal for selecting a new play mode,” as disclosed at column 7, lines 40-42;

when a user input is received indicating a desired change in the presentation rate, the media server (50) finds a tuple in the index table of the current stream or file that contains an offset beyond the current output offset and then searches the index table for the nearest offset greater than or equal to the byte offset of the current output of the stream, the media server (50) then finding the tuple in the index table of the new stream, i.e. the stream to be output, with the nearest normal play time to the normal play time of the current stream, and then uses the offset of the found tuple to initiate output of the new stream at that offset, which reads on the claimed, “reading the linking information (12); determining a first position in the file for the new play mode, the first position corresponding, according to the linking information (12), to a second position in the part of the play stream (10, 11, 15) that is replayed substantially at the time on which the switch signal is received; continuing replay with new play stream data from the file corresponding to the new play mode, starting with data determined by the first position,” as disclosed at column 10, lines 31-67.

Regarding **claim 3**, DeMoney discloses everything claimed as applied above (see claim 2). Further, DeMoney discloses server (50) analyzes timestamps within the stream by analyzing the presentation timestamps from the sequence headers in the stream, and then maps the presentation timestamps to a "normal play time" (NPT) standard, thus defining a multimedia index based on the concept of NPT that can be associated with a "position" within a multimedia file, which reads on the claimed, "wherein the normal stream and the trick play stream contain program clock references (PCR) for defining progress of time during play of the normal stream (10) and the trick play stream (11, 15) defined to respective time bases respectively," as disclosed at column 8, lines 6-8 and lines 26-29;

the look-up tables (LUTs) comprising tuples, each tuple comprising a normal play time value and a corresponding file offset within the stream, which reads on the claimed, "wherein the linking information specifies correspondence information items, each between program clock reference (PCR) values of corresponding positions in the respective streams (10, 11, 15)," as disclosed at column 9, lines 19-20 and exhibited in figure 5;

the media server (50) finds a tuple in the index table of the current stream or file that contains an offset beyond the current output offset, and the media server (50) finds the tuple in the index table of the new stream with the nearest normal play time to the normal play time of the current stream, which reads on the claimed, "the method comprising retrieving a program clock reference (PCR) value for the first position from

the linking information, and searching for the first position on the basis of the retrieved program clock reference value," as disclosed at column 10, lines 31-34 and lines 62-65.

Regarding **claim 4**, DeMoney discloses everything claimed as applied above (see claim 3). Further, DeMoney discloses the media server (50) finds a tuple in the index table of the current stream or file that contains an offset beyond the current offset output, which reads on the claimed, "wherein the linking information is contained in and retrieved from the file that contains the play stream (10, 11, 15)," as disclosed at column 10, lines 32-34 (wherein "the index table of the current stream" implies that the LUT is contained within the stream).

Regarding **claim 5**, DeMoney discloses everything claimed as applied above (see claim 4). Further, DeMoney discloses that equivalent positions in multimedia streams having different presentation rates will have equal NPT values, and that the index look-up tables only include tuples representing valid positions for starting, stopping, or transferring between the streams, which reads on the claimed, "wherein the correspondence information items are stored in at least one of the files for the normal play stream (10) and the trick play stream (11, 15), each at a position substantially where the clock reference (PCR) value of the item assumes the value corresponding to the item," as disclosed at column 9, lines 39-41 and lines 55-57.

Regarding **claim 6**, DeMoney discloses everything claimed as applied above (see claim 2). Further, DeMoney discloses the media server (50) reads the respective normal play or trick play stream from the storage media and provides the data out to the one or more display units or viewers, which reads on the claimed, "wherein the method

further comprises the step of successively displaying video information decoded from the play stream (10, 11, 12) and the new play stream (10, 11, 12) on a display device,” as disclosed at column 7, lines 30-33.

Regarding **claim 7**, the examiner maintains that the claim is the corresponding apparatus to the method of claim 1 and therefore the limitations of the claim are rejected in view of the explanation set forth in claim 1 above.

Regarding **claim 8**, DeMoney discloses everything claimed as applied above (see claim 7). Further, the limitations of the claim are rejected in view of the explanation set forth in claim 3 above.

Regarding **claim 9**, DeMoney discloses everything claimed as applied above (see claim 7). Further, the limitations of the claim are rejected in view of the explanation set forth in claim 5 above.

Regarding **claim 10**, the examiner maintains that the claim is the corresponding apparatus to the method of claim 2, and therefore the limitations of the claim are rejected in view of the explanation set forth in claim 2 above.

Regarding **claim 11**, the limitations of the claim are rejected in view of the explanation set forth in claim 1 above.

Regarding **claim 12**, DeMoney discloses everything claimed as applied above (see claim 11). Further, DeMoney discloses LUTs containing NPT time standard information which provides an indication of contextual position within a compressed video stream by assigning an increasing numeric value to succeeding elements, e.g., frames or sequences, in the stream, which reads on the claimed, “wherein the linking

information comprises successive instalments of for successive parts of the streams (10, 11, 15) as tables in the stream (10, 11, 15).

Regarding **claim 13**, DeMoney discloses a system and method for indexing between trick play and normal play video streams in a video delivery system. Further, DeMoney discloses index look-up tables that specify indices or entries each based on a normal play time and a file offset to allow the multimedia server (50) to initiate or stop play at a particular normal play time point in the multimedia stream, and the index look-up table indices also allowing the multimedia server (50) to transfer to and between equivalent positions between streams of different presentation rate, i.e., between normal play and trick play streams, which reads on the claimed, "a video play stream signal comprising successive instalments of linking information (12), which links positions of content within a normal play stream (10) to positions of corresponding content within one or more different trickplay versions (11, 15) of the video play stream," as disclosed at column 9, lines 48-57.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Zdepski et al (US Patent 6,445,738) discloses a system and method for creating trick play video streams from a compressed normal play video bitstream.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARC DAZENSKI whose telephone number is (571)270-5577. The examiner can normally be reached on M-F, 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on (571)272-7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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